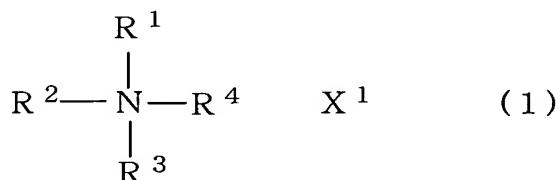


ABSTRACT OF THE DISCLOSURE

An electrolytic solution for use in nonaqueous electrolytic lithium secondary cells which contains a room temperature molten salt, i.e., an aliphatic quaternary ammonium salt of the formula (1), an organic solvent and a lithium salt of the formula (2), the electrolytic solution being characterized in that the organic solvent contains vinylene carbonate in an amount of 1 to 5 wt. % based on the electrolytic solution, and a lithium secondary cell using the electrolytic solution



wherein R¹ to R³ are each a chain hydrocarbon having 1 to 4 carbon atoms, R⁴ is methoxymethyl, ethoxymethyl, propoxymethyl or isopropoxymethyl, and X¹ and X² are each a fluorine-containing anion.